

**Statement of Thomas L. Greaney**

Visiting Professor of Law, UC Hastings College of Law

Chester A. Myers Professor Emeritus, Saint Louis University School of Law

Before the

**U.S. Senate**

**Committee on the Judiciary**

**Subcommittee on Antitrust, Competition Policy, and Consumer Rights**

**Hearing:** *Your Doctor/Pharmacist/Insurer Will See You Now: Competitive Implications of Vertical Consolidation in the Healthcare Industry*

June 12, 2019

Chairman Lee, Ranking Minority Member Klobachar, and Committee Members. Thank you for the opportunity to appear before you today. It is truly an honor and pleasure to share my views on this important topic. As you can see from my bio, I've spent most of my career toiling in the vineyards of healthcare antitrust.

By way of introduction, I am currently Visiting Professor of Law at the University of California Hastings College of Law and Distinguished Senior Fellow with the UCSF/UC Hastings Consortium on Law, Science and Health Policy. I am also the Chester A. Myers Professor Emeritus at Saint Louis University School of Law where I directed that school's Center for Health Law Studies. I have devoted most of my 30-year academic career to studying issues related to competition and regulation in the health care sector, writing numerous articles on the subject and co-authoring the leading casebook in health law. I have recently co-authored with Professor Barak Richman of Duke a two-part white paper for the American Antitrust Institute analyzing consolidation in the delivery and payment of health care services. Before joining academia, I served as Assistant Chief in the Antitrust Division of the United States Department of Justice, litigating and supervising cases involving health care. My professional affiliations include membership in the American Health Lawyers Associations and I serve on the Advisory Board of the American Antitrust Institute. My testimony today and before the California Department of Insurance concerning the CVS/Aetna merger, and my work on all matters involving policy and law before public bodies is done on a strictly pro-bono basis: I receive no compensation from any organization for this work.

### *Summary of Testimony*

As this subcommittee knows well, antitrust law is under scrutiny today. A number of academic and policy experts have suggested that less-than-robust government enforcement together with constricting and antiquated legal precedents have turned us into a nation of oligopolies. And it is especially appropriate that this subcommittee take a close look at the consolidation trends in health care because mergers have contributed significantly to the high cost of care in this country.

In addition to this statement, I am attaching an articles that contains my analysis of vertical merger activity in various health care sectors. Let me quickly summarize four key takeaways:

- Our health care system depends on competitively-structured markets to provide high quality and innovation at affordable prices.
- Despite the commendable success of government antitrust enforcers in challenging mergers to near-monopoly in provider and insurance markets, they have maintained a laissez-faire approach to vertical mergers that threaten competition. Foregoing challenges to acquisitions of physician practices by

dominant hospitals and to consolidations of PBMs, health insurers, and pharmacies has given an “all clear” signal on health care vertical mergers.

- While most vertical mergers do not impair competition, it should not be assumed that all are benign, that significant efficiencies will always be realized, or that cost savings will be passed along to consumers.
- Antitrust enforcers, health care regulators, and state and federal legislatures should take action with regard to vertical mergers in health care, e.g. evaluate and explain conditions conducive to lessening competition, bring cases that establish workable judicial precedents, and adjust regulatory incentives that artificially spur consolidation.

### *The Importance of Stopping Anticompetitive Vertical Mergers in Health Care*

The article I submitted begins with a quote from George Orwell’s novel *Animal Farm* in which one of the animals, Snowball, describes his world view: “Four legs good, two legs bad.” And I compare that to the Chicago School’s view of mergers which is “Vertical Good, Horizontal (sometimes) bad.” That pretty much describes how government enforcers, and to a degree, the courts have treated vertical mergers. It also explains why case law is sparse and in fact out-of-date in this area.

However, contemporary economic analyses have sharply questioned the basis for a laissez-faire approach to vertical combinations. They have debunked many of the underlying assumptions that have misled the development of the law. And contemporary scholarship explains the circumstances giving rise to consumer harm. For example, by combining needed inputs or complements with distribution, a vertical merger can enhance incentives for the merged firm to exclude its downstream or upstream rivals, either by raising their costs or cutting off their access to critical resources. Professor Steven Salop’s extensive body of work provides a sound economic model of foreclosure risks and maps the potential legal framework for applying the so-called “raising rivals’ cost” principles to vertical mergers.

Now the FTC, Department of Justice and State Attorneys general have had commendable success challenging *horizontal* mergers of hospitals, physicians and insurers. But at the same time, the nation has learned the hard way that overlooking hospital consolidation in health care is costly. Over a seven-year period during the 1990s no horizontal hospital mergers were challenged. This implicit “green light” accelerated a horizontal merger wave that gave rise to extensive local hospital market concentration which in turn has resulted in higher insurance premiums for consumers ever since.

A similar litigation vacuum may be occurring with respect to vertical mergers. Economic evidence suggests that antitrust enforcers’ benign neglect of vertical mergers between hospitals and physicians has resulted in excessive pricing of physician services. A significant body of research demonstrates that when hospitals in concentrated markets acquire physician practices, they raise the prices their employed physicians charge, exercising their market power and taking advantage of regulations that improperly reward consolidation.

Not only have commercial insurers paid more as a result of vertical mergers, but so has Medicare: it pays both a physician fee and hospital facility fee when a physician becomes part of a hospital outpatient department whereas it would pay only a physician fee if the service had been provided in an outpatient physician office. And let's not forget the effect all this has on consumers who face high co-pays and deductibles: not only unaffordable prices, but for many foregoing needed health care.

### *CVS/Aetna: The Emerging Middleman Oligopoly*

As the title of this hearing suggests, the country is now entering a phase of consolidation of powerful middlemen. The merger of CVS and Aetna combines CVS, one of the nation's two largest PBMs and the largest pharmacy chain with dominant positions in local markets with Aetna, the nation's third largest commercial insurer. At the end of the day, illustrating the appreciable danger of this merger, we will see three firms: CVS/Aetna; United/Optum and Cigna/Express Scripts controlling the great majority of the nation's medical and pharmaceutical spend. Economic testimony presented last week at the Tunney Act proceeding before Judge Leon in the District Court for the District of Columbia outlined at least four highly plausible grounds for concern about the increasing bargaining leverage CVS/Aetna may be able to exercise:

- The risk that as a "must have" pharmacy in many local markets it could cut off or raise rival insurers' or PDP plans' costs
- As a "must have" PBM services supplier or part of a tight oligopoly, the risk that it can likewise cut off or raise rival insurer or PDP plans' costs
- That there will be significant "customer foreclosure" in local markets, as rivals will lose access to Aetna beneficiaries
- That there will be enhanced incentives for the three dominant, vertically consolidated PBM/insurance entities to act in lock-step fashion on price and administrative arrangements

Former FDA Commissioner Gottlieb summarized the middleman risks well:

The top three PBMs control more than two-thirds of the market; the top three wholesalers more than 80%; and the top five pharmacies more than 50%. Market concentration may prevent optimal competition. And so the saving may not always be passed along to employers or consumers.

Too often, we see situations where consolidated firms -- the PBMs, the distributors, and the drug stores -- team up with payors. They use their individual market power to effectively split some of the monopoly rents with large manufacturers and other intermediaries rather than passing on the saving garnered from competition to patients and employers.

### *Efficiencies in Vertical Mergers: Pervasive but Over-Hyped*

The notion that vertical mergers are almost always procompetitive owing to their unique propensity to improve coordination and achieve other cost savings underlies the disinclination to closely examine most mergers. Professor Salop and others have debunked the economic underpinnings of this belief, cataloguing the empirical and theoretical learning that indicates that leads to overestimating benefits and ignoring the fact that many of claimed benefits are not likely to be achieved or merger specific.

While there are unquestionably important benefits that flow from vertical mergers, it is a mistake to assume they always occur and to shape policy and enforcement priorities on such assumptions. First, as economist Martin Gaynor has cautioned, “consolidation is not coordination.” That a large number of mergers fall short on promised benefits—one study shows that 83% fail to increase shareholder returns—should not be a surprise. Culture clashes, incompatible business methods, lack of synergistic capability and planning, absence of good management, and inadequate pre-merger information are among the many reason that hoped-for benefits are not realized. Studies of the outcomes of health care consolidation by Professor Lawton Burns and others indicate that savings accruing from vertical integration often prove to be ephemeral.

Second, benefits attributable to mergers are sometimes also achievable by contracting. Joint ventures among vertically situated market participants are common in health care and because they are not permanent and pose less competitive risk. Accordingly, antitrust merger law appropriately insists that claimed efficiencies be “merger-specific.” That standard should apply to investigations of vertical mergers.

### *Concentration Begets Anticompetitive Conduct*

Experience demonstrates that concentration coupled with entry barriers and some of the unique aspects of health care markets offer opportunities and incentives to engage in anticompetitive conduct. The history of antitrust law in the health care sector is littered with examples of hospitals, physician organizations, and insurers that have taken advantage of their dominant market positions, barriers to entry, and the absence of effective regulatory oversight to disadvantage rivals and impair competition. For example, in the last several years antitrust cases have been brought against: a dominant insurer that lessened competition by requiring hospitals to agree to most favored nations clauses; a hospital with market power insisting that payors refrain from using tiering arrangements discouraged competitive contracting; a large hospital system restraining competition by “all or nothing” contracting for its hospitals, restricting sharing of cost information and other practices; and patented drug manufacturers conspiring with generic firms to delay competitive entry.

At the same time, antitrust doctrine is tolerant of *extant* market power and rarely sanctions dominant firms, especially in cases involving unilateral refusals to deal with rivals. It only condemns monopolists that inappropriately obtain or maintain market power, and even in those cases plaintiffs may settle for conduct commitments rather than divestiture of assets. Moreover, cases alleging anticompetitive exclusion have faced high doctrinal hurdles. Given the law’s tolerance of extant market power and the propensity of dominant firms to entrench or extend their reach, merger law’s prophylactic remedies are especially important. As Professor Herbert

Hovenkamp has argued, it is most appropriate to apply the incipency standard in certain cases-- such as vertical merger challenges-- where the consolidation is likely to lead to conduct that is both anticompetitive but also is difficult or impossible for antitrust law to reach once the merger has occurred.

### *Concentration Begets Regulation*

Concentration also begets regulation. State attorneys general have allowed anticompetitive mergers to go forward on the condition that the merged hospital agree to price caps and other regulatory restrictions. A number of states have adopted "Certificate of Public Advantage laws" that also give approval to mergers and other consolidations subject to a public agency regulating their rates and other commitments. Under antitrust law's state action defense, these "COPA" laws immunize mergers from federal antitrust challenge and the FTC has had to abandon challenges to hospital mergers-to-monopoly based on this doctrine. This unfortunate state of the law has become an open invitation for hospitals to lobby for regulatory approval of monopoly mergers. Indeed, I recently read an article in a health lawyers' publication entitled *COPAs: A Way Around Antitrust Enforcement to Get Your Hospital Merger Through?*

### *Fixes that Fail: Behavioral Remedies in Vertical Merger Cases*

The quintessential remedy in merger cases is structural relief: enjoining a merger or ordering divestiture of assets that raise competitive concerns. However in the over 20 vertical mergers challenged and settled by consent decree by the Department of Justice and FTC, the remedy has been "behavioral." These settlements permit mergers to go forward but require the parties to comply with a variety of restrictions such as adopting information firewalls, abiding by non-discrimination requirements, submitting to arbitration, and many others. Economic analyses by Professor John Kwoka and Diana Moss have pointed out that effective remedies are difficult to develop and enforce. Assistant Attorney General Delrahim apparently agrees and has expressed a strong preference for structural remedies. While this is sound policy, a concern may be raised--perhaps evidenced by the Division's failure to challenge the vertical aspects of the CVS/Aetna merger--that forbearance on behavioral remedies coupled with reluctance to aggressively pursue vertical mergers can result in even greater laxity in enforcement.

### *Going Forward*

Guidance concerning vertical merger law is sorely needed. While AAG Delrahim's announcement that DoJ is working on developing new non-horizontal merger guidelines is encouraging, it takes considerable time for guidelines or policy statements to diffuse and gain acceptance by courts and attorneys. The merger process is opaque: outsiders can gain only limited information about settled cases from complaints or competitive impact statements. Hence, mandated fuller closing statements, and perhaps requiring post-merger reviews of outcomes should be considered to increase the flow of information.

But more than information is needed. Litigation in appropriate cases, especially in important markets like health care where vertical integration is spreading rapidly, would speed adoption of contemporary economic analyses. Relatedly, undertaking retrospective analyses of

consummated mergers could supply useful information for courts, enforcers, and market participants to guide future actions. Notably FTC Chairman Muris' initiative in the mid 2000's to undertake retrospective studies of horizontal mergers played an important role by spurring renewed litigation that ultimately righted the ship and corrected erroneous precedents.

Finally there is the view that merger law has strayed far from the original intent of the law. The legislative history suggests that in strengthening the Clayton Act in 1950 Congress intended that courts and enforcers take seriously the "reasonable probability" and "incipiency" standards and apply them to vertical as well as horizontal mergers. Summarizing the drift in merger law from those standards to one that requires almost certain evidence of price effects, Professor Tim Wu recommends that "an overhaul of merger law is a priority." It may well be the case that only a change in the statutory language of the Clayton Act can promptly undo years of erosion of the law's core objectives.

Although beyond the scope of this hearing, in closing I would like to mention that a broad range of regulatory and statutory measures might be adopted to improve competition in health care markets. Proposed agendas authored by Greaney & Richman, Martin Gaynor, Avik Roy, and Emily Gee and Nathan Gurwitz are cited in the appendix to this statement. These papers provide a useful roadmap through the thicket of regulations, policies, and practices that restrict effective competition in health care.

Thank you for your attention and I look forward to your questions.

Attachment: Greaney, *The New Health Care Merger Wave: Does the "Vertical, Good" Maxim Apply?*

## Appendix: References

- Jonathan B. Baker et al., *Five Principles for Vertical Merger Enforcement Policy*, <https://scholarship.law.georgetown.edu/facpub/2148/> (2019).
- Lawrence Baker et al, *Vertical Integration: Hospital Ownership of Physician Practices Is Associated with Higher Prices and Spending*, 33 *Health Affairs* 756 (2014)
- Lawton Burns, Testimony before the Investigatory Hearing on the Merger of Aetna into CVS Health Care Corporation, California Department of Insurance (June 19, 2018)
- Cory Capps et al, *The Effect of Hospital Acquisitions of Physician Practices on Prices and Spending*, 59 *J. Health Econ.* 139 (2018)
- Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, *Merger Enforcement Under Uncertainty and Imperfect Information* (July 7, 2018)
- Martin Gaynor, “Examining the Impact of Health Care Consolidation,” Statement Before the Energy and Commerce Oversight Committee, U.S. House of Representatives (February 14, 2018)
- Martin Gaynor, et al., *MAKING HEALTH CARE MARKETS WORK: COMPETITION POLICY FOR HEALTH CARE* (April, 2017)
- Martin Gaynor & Robert Town, *THE SYNTHESIS PROJECT: THE IMPACT OF HOSPITAL CONSOLIDATION* (Robert Wood Johnson Foundation 2012)
- Emily Gee & Ethan Gurwitz, *PROVIDER CONSOLIDATION DRIVES UP HEALTH CARE COSTS: POLICY RECOMMENDATIONS TO CURB ABUSES OF MARKET POWER AND PROTECT PATIENTS* (Center for American Progress 2018)
- Scott Gottlieb, Commissioner of Food and Drugs, “Capturing the Benefits of Competition for Patients,” Speech before America’s Health Insurance Plans National Health Policy Conference (March 7, 2018)
- Thomas L. Greaney, *The New Health Care Merger Wave: Does the “Vertical, Good” Maxim Apply?* 46 *J. L., Medicine & Ethics* 918 (2018)
- Thomas L. Greaney, *Navigating the Backwater: Vertical Mergers in Healthcare*, *CPI Antitrust Chronicle* 1 (May 2019)
- Thomas L. Greaney & Barak D. Richman, *CONSOLIDATION IN PROVIDER AND INSURER MARKETS: ENFORCEMENT ISSUES AND PRIORITIES*, Part I of the American Antitrust Institute White Paper Series on Competition in Payment and Delivery of Health Care Services (June, 2018)

Thomas L. Greaney & Barak D. Richman, PROMOTING COMPETITION IN HEALTHCARE ENFORCEMENT AND POLICY: FRAMING A COMPETITION AGENDA, Part II, AAI White Paper Series (June 2018)

Herbert Hovenkamp, *Prophylactic Merger Policy*, 70 *Hastings L. J.* 45 (2018)

KPMG, *Unlocking Shareholder Value: The Keys to Success*, [people.stern.nyu.edu/adamodar/pdfiles/eqnotes/KPMGM&A.pdf](http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/KPMGM&A.pdf)

John Kwoka, *MERGERS, MERGER CONTROL, AND REMEDIES* (MIT Press 2014)

Robert Kocher and Nikihl Sahni, *Hospitals' Race to Employ Physicians- The Logic behind a Money-Losing Proposition*, 363 *New Eng. J. Med.* 1790 (2012).

J. Robinson & K. Miller, *Total Expenditures per Patient in Hospital-Owned and Physician-Owned Physician Organizations in California*, 312 *JAMA* 1663 (2014)

Diana Moss, Testimony in Tunney Act Hearing, U.S. v. CVS Health Corp. (D.C. Dist. Ct) (June 4, 2019).

J. Robert Robertson, *Non-horizontal Merger Enforcement? Of Course They Can*, 32 *Antitrust* 54 (2018)

Avik Roy, *IMPROVING Hospital Competition: A Key to Affordable Health Care* (FreeOp 2019)

Steven A. Salop, *Invigorating Vertical Merger Enforcement*, 127 *Yale L. J.* 1962 (2018)

Richard M. Scheffler et al, *Health Care System: Impacts on ACA Premiums and Outpatient Visit Prices*, 37 *Health Affairs* (Sept. 2018)

Neeraj Sood, Testimony in Tunney Act Hearing, U.S. v. CVS Health Corp. (D.C. Dist.Ct) (June 4, 2019).

Tim Wu, *THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE* (2018)

---

# The New Health Care Merger Wave: Does the “Vertical, Good” Maxim Apply?

Thomas L. Greaney

“Four legs good, two legs bad” (Snowball, *Animal Farm*)<sup>1</sup>

“Vertical good, horizontal bad” (Jonathan Baker, adapting Snowball’s maxim to characterize Chicago School antitrust principles)<sup>2</sup>

## I. Background: Vertical Integration in Health Care

American antitrust enforcement agencies (the Federal Trade Commission, Department of Justice and State Attorneys General) have long devoted an extraordinary proportion of their resources to the health care sector. For example, challenges to hospital mergers, physician cartels, and “reverse payments” by pharmaceutical companies, insurance company mergers, and anticompetitive practices have been featured prominently in government litigation, advisories, and policy statements.<sup>3</sup> Indeed, it is fair to say that since the early 1980s health care has been and continues to be a top priority of antitrust enforcers under both Republican and Democratic administrations.

In recent years, the Agencies have won a series of important cases challenging horizontal mergers in the hospital,<sup>4</sup> physician,<sup>5</sup> and insurance<sup>6</sup> sectors that have clarified the law and sent a clear message that combinations of competitors in concentrated local markets will face close scrutiny. Reversing a series of losses in litigated hospital merger cases, these decisions established what are likely to be enduring precedents. Among other things, they clarified that provider and insurer markets are highly localized; rejected arguments that market power will be checked by the countervailing power of large or sophisticated buyers; and declined to accept arguments that uncertainties arising from rapidly-changing market conditions undermine inferences of market power or that consolidation is essential to achieve beneficial integrative efficiencies.<sup>7</sup>

Not surprisingly — given these precedents and seismic shifts in government and commercial payment practices — action has shifted to vertical mergers. The combined effect of the Affordable Care Act (ACA), the Medicare Access & CHIP Reauthorization Act (MACRA) and other policy changes has created a strong gravitational pull toward integration.<sup>8</sup> For example, the ACA created new incentives for hospitals and physicians to develop innovative organizational structures that can respond to new financing mechanisms such as bundled payments and global reim-

---

**Thomas L. Greaney, J.D.**, is a Visiting Professor at the University of California Hastings College of Law, Distinguished Senior Fellow, UCSF/UC Hastings Consortium on Law, Science and Health Policy, and Professor Emeritus, Saint Louis University School of Law.

bursements. The “new new things” spreading rapidly around the country such as accountable care organizations (ACOs) and patient centered medical homes (PCMH), along with a revival of various forms of joint ventures and alliances, are responses to the legislative impetus to deliver care in a seamless and coordinated manner. MACRA has served to accelerate the move to physician employment by hospitals by providing strong financial incentives under Medicare reimbursement for physicians to join APMs — entities delivering integrated care using risk models. Moreover, the complexity and cost of creating such integrating organizations have driven physicians to accept employment opportunities by corporations, principally hospitals.<sup>9</sup>

Following suit, some insurers have begun to look to integrate vertically, merging with pharmacies and pharmacy benefit managers and acquiring hospitals,<sup>10</sup> surgicenters,<sup>11</sup> and physician groups.<sup>12</sup> Several of the mergers under review as this article is being written combine formidable competitors in their respective sectors. Cigna, one of the largest health insurers in the country has proposed to acquire Express Scripts, the nation’s largest pharmacy benefit manager. CVS, the largest U.S. drugstore chain and one the second

nevertheless often regarded as a prerequisite for innovation. Further, antitrust enforcers and courts have long relegated vertical mergers and exclusion issues to a very secondary role and legal doctrine is underdeveloped. Consequently, antitrust law may offer no buffer against the new health care merger wave.

This essay questions the wisdom of adherence to an indulgent approach to vertical integration in health care. It first critiques the bases for antitrust law’s traditional tolerance of vertical integration and describes contemporary economic learning that supports more robust antitrust enforcement. It goes on to dispute arguments urging extra caution in dealing with the health care sector and concludes with several justifications for close scrutiny of vertical health sector mergers.

## II. The Law’s Inattention to Vertical Mergers

### A. *The Legal Vacuum.*

Antitrust enforcers have shown little interest in opposing vertical mergers and consequently the case law on vertical mergers is dated and sparse. In its challenge the AT&T/Time Warner merger,<sup>17</sup> the Department of Justice unsuccessfully litigated its first vertical merger

case in forty years;<sup>18</sup> its badly out-of-date Non-Horizontal Merger Guidelines were first issued in 1992;<sup>19</sup> and the most recent Supreme Court decision dates back to 1972.<sup>20</sup> Likewise the record on vertical mergers in health care is barren. In its first litigated case<sup>21</sup> involving a physician merger, *Saint Alphonsus Medical Center-Nampa & FTC v. St. Luke’s Health System*,<sup>22</sup> the FTC prevailed in a challenge to

acquisition of a physician group by a hospital system that would have increased the hospital’s existing share of the primary care physician market to approximately 80 percent. Although the factual findings in the case tended to support a finding of vertical foreclosure, the FTC and the district court and Ninth Circuit focused on the merger’s horizontal effects and did not address the vertical theory advanced by a rival hospital.<sup>23</sup> As discussed below, the government’s disinclination to challenge vertical mergers is rooted in a laissez-faire ideology that is premised on dubious economic principles.

### B. *Questioning the “Vertical, Good”<sup>24</sup> Assumption*

As a general matter, Chicago School analysis finds strong efficiency benefits in vertical arrangements and urges presumptions that favor such linkages. In the case of vertical mergers, it stresses potential efficiencies flowing from improved coordination in pricing, production, and design that can reduce costs and improve

---

It is fair to say that since the early 1980s health care has been and continues to be a top priority of antitrust enforcers under both Republican and Democratic administrations.

---

largest pharmacy benefit manager, has announced an agreement to acquire Aetna, the third biggest health insurer. The largest health insurer, UnitedHealth, which operates the third largest PBM and owns 250 urgent care centers and 200 surgical centers, is set to acquire DaVita Medical group which operates over 300 clinics and urgent care centers and employs over 2000 health care providers.<sup>13</sup>

The confluence of rapid change in regulation, payment, and delivery modalities has prompted debate about the appropriate course for antitrust enforcement in the health care sector. Some have counseled a “watchful waiting” approach that would allow innovation and experimentation to proceed free of strict antitrust scrutiny of structures and conduct.<sup>14</sup> Indeed, a stronger version of this account argues that the need for significant, system-wide integration should be understood to override traditional antitrust concerns.<sup>15</sup> While some critiques urge more direct regulatory controls over dominant players,<sup>16</sup> consolidation is

product quality. Early Chicago critiques questioned whether competitive harm could ever arise from vertical mergers,<sup>25</sup> arguing that they merely realigns purchase patterns among competing firms and that they cannot enhance monopoly power because there is only a “single monopoly profit” that can be earned, whether or not the monopolist is vertically integrated.<sup>26</sup> These assumptions, which have been called into question by contemporary economic analyses, led to the mistaken assumption, reflected in enforcement policy and court decisions, that vertical mergers are invariably efficient and procompetitive.

To be sure, as a general matter vertical integration in health care delivery provides much-needed changes in economic incentives. For example, efficiencies arising out of hospital/physician integration have theoretical appeal given the woefully inefficient arrangements that preceded it. Vertically integrated care delivery holds the promise of improved efficiency through reductions in unnecessary and duplicative care while lowering transaction and administrative costs arising from the use of hierarchical commands rather than contractual arrangements to assure efficient coordination.<sup>27</sup> Likewise integration of payment and delivery may redirect incentives away from rewarding volume instead of value. However, the *potential* for consumer benefits, even if significant, should not be the basis for turning a blind eye to instances of creation, entrenchment, or abuse of market power.

Economic analyses have become more skeptical of vertical consolidation. Post-Chicago school scholarship has challenged the conventional wisdom that “virtually all exclusion claims are chimerical”<sup>28</sup> and has advanced the claim that under commonly occurring conditions exclusionary strategies can profit firms and harm competition.<sup>29</sup> This account demonstrates that preconditions underlying Chicago’s critique “rarely hold, and the broad claim that there is a single monopoly profit can obscure how a particular merger may raise real competitive concerns.”<sup>30</sup> While vertical mergers do not increase concentration they may enable conduct that limits rivalry at the horizontal level. By combining inputs with distribution, for example, a vertical merger can enhance incentives for the merged firm to exclude its downstream or upstream rivals, either by raising their costs or cutting off their access to critical resources. Professor Steven Salop’s extensive body of work provides a sound economic model of foreclosure risks and maps the potential legal framework for applying the so-called “raising rivals’ cost” principles to vertical mergers.<sup>31</sup> Besides exclusionary effects, Post-Chicago analyses have identified other potential harms from vertical mergers including reducing potential competition, increasing

coordinated effects,<sup>32</sup> enabling evasion of regulation<sup>33</sup> and facilitating harmful price discrimination.

### *C. Examples of Potential Harms Arising From Vertical Mergers in Health Care Markets*

The new merger wave would reorganize markets in a variety of ways. While it is certainly true that “disruptive” change may spur innovation and invigorate competition, it is important to recognize that some forms of disruption can also enhance or create market power. I sketch below the means by which recent vertical mergers might harm consumers.

*Hospital Acquisitions of Physician Practices.* A core concern with hospital acquisition of physician practices is that they may foreclose rival hospitals and potential entrants into the hospital services market from obtaining a sufficient base of patients because they are deprived of access to physicians to admit, treat, or refer to their facilities. Economic harm may flow from either (1) eliminating competition from non-consolidated rival hospitals in hospital service lines so as to increase the market power of the vertically-integrated hospital or (2) impairing the non-vertically consolidated hospitals’ ability to compete resulting from reduction of their outputs, higher average costs, and higher prices.<sup>34</sup> Where such strategies enhance the bargaining power of the vertically-integrated hospital vis a vis payers, cognizable consumer harms may arise.

### *Linkages of Pharmacies, Health Insurers, and PBMs.*

The proposed merger which of CVS, which has significant market power in retail pharmacy and PBM services, with Aetna, a leading health insurer illustrates the risk of foreclosure or raising costs to rival insurers. Letters to the Justice Department by the California Department of Insurance, the American Medical Association, and the American Antitrust Institute opposing the merger explain risks. First, the merged firm could impose a variety of conditions that would disadvantage rival insurers needing PBM services thereby impairing competition in downstream health insurance markets.<sup>35</sup> For example, CVS could develop formularies for rivals that do not include important drugs that are in demand by their subscribers or offer pharmacy networks that do not provide important pharmaceutical distribution options to rival subscribers. Another plausible anticompetitive strategy would be to foreclose or raise costs to rival pharmacies needing access to customers insured by Aetna.<sup>36</sup> This could be accomplished by cutting off independent pharmacies’ access to Aetna customers altogether or raising their costs by exercising the bargaining leverage of the CVS PBM in contracting for pharmacy services.<sup>37</sup>

*PBM/Health Insurance Oligopoly.* Vertical mergers may also impair competition when they enhance the ability and incentives to engage in horizontal coordination. As an example, the mergers currently under review — Express Scripts’ announced plans to merge with Cigna and CVS’s acquisition of Aetna — along with UnitedHealthcare’s operation of a PBM would establish an oligopolistic market in health and pharmacy management with three of the nation’s largest health insurers owning the three largest pharmacy benefit management entities.<sup>38</sup> Controlling by some estimates over 70% of the PBM market, and with only a very small portion of the market served by entities not integrated with a health insurer, the “Big Three” vertically integrated firms would have common incentives to weaken the competitive conditions of rival health insurers.<sup>39</sup> For example, as one analysis put it, they could “act on shared incentive to withhold or weaken PBM bids to health plan rivals” that would “raise rivals’ costs or lead to a diversion to sub-scale PBMs with higher costs and lower quality.”<sup>40</sup> Given cost advantages arising to their leverage in negotiating with pharmaceutical companies, the Big Three would face little threat from rival PBMs and have strong incentives and capacity to coordinate their strategies to disadvantage rival health insurers.

Applying raising rivals’ cost principles to these cases undoubtedly entails a heavily fact-intensive inquiry. Fact finders need to assess not only whether exclusion is likely to occur but also whether such exclusion will harm competition, and if so, whether merger-specific efficiencies are sufficient to prevent or mitigate the exercise of market power. While legal precedent and agency guidance establishing workable principles and presumptions are lacking, some baseline factors can be identified that should trigger concern about vertical mergers. For example, economists identify market structure conditions including market dominance, barriers to entry, scale economies and network effects as important indicia of potential competitive harm.<sup>41</sup> Qualitative factors such as economic incentives to use vertical mergers to forestall entry or raise rivals’ costs and regulatory conditions that encourage vertical consolidation are also relevant.<sup>42</sup> The next section describes aspects of health care markets that may make them vulnerable to adverse effects of vertical mergers.

### III. Why Vertical Mergers in Health Care May Harm Competition

Antitrust law has long recognized that market conditions in the health care sector, while assuredly less than optimal, are nonetheless subject to the same kinds of abuses from anticompetitive mergers and conduct as other sectors of the economy. The following offers sev-

eral reasons why the vertical merger wave in health care should be subject to close scrutiny by antitrust enforcers and courts.

#### A. Market Conditions and Performance

Provider, payer, and health pharmaceutical management markets exhibit key pre-conditions for harm from vertical mergers: they are highly concentrated, exhibit durable barriers to entry, and have historically performed poorly. The following chart illustrates the degree of concentration in the several sectors which are involved in the new merger wave.

<b>Commercial insurance:</b>
<ul style="list-style-type: none"> <li>• 69 % of insurance markets highly concentrated.<sup>43</sup></li> <li>• In half of all markets, 2 largest insurers have &gt;70% of the market.<sup>44</sup></li> <li>• The share of the largest four insurers increased from 74 to 83% from 2006 to 2014.<sup>45</sup></li> </ul>
<b>Pharmacy Benefit Management</b>
<ul style="list-style-type: none"> <li>• Three largest PBMs control approximately 70% of the national market.<sup>46</sup></li> </ul>
<b>Physician services</b>
<ul style="list-style-type: none"> <li>• 65% of MSAs have highly concentrated specialty markets; 39% have concentrated primary care markets.<sup>47</sup></li> <li>• Hospital employment of primary care physicians grew from 28% to 44% between 2006 and 2016<sup>48</sup></li> </ul>
<b>Retail Pharmacies</b>
<ul style="list-style-type: none"> <li>• The two largest chains control 50-75% of the drug stores in the nation’s 14 largest markets.<sup>49</sup></li> </ul>
<b>Hospitals</b>
<ul style="list-style-type: none"> <li>• 90% of inpatient acute care hospital markets are highly concentrated.<sup>50</sup></li> <li>• Many large metropolitan markets, e.g. Boston, Pittsburg, San Francisco are dominated by one or two hospitals.<sup>51</sup></li> </ul>

In each sector there is evidence that entry barriers are high, as market shares have grown or stabilized at high levels of concentration and entry has been limited or non-existent.<sup>52</sup> In addition, numerous studies demonstrate that concentration in health care is associated with high prices,<sup>53</sup> and in some cases reduced quality.<sup>54</sup> Moreover, a variety of health market characteristics including inelasticity of demand, imperfect information and imperfect agency relationships make health care markets vulnerable to the exercise of

market power.<sup>55</sup> Such conditions exacerbate the risks of competitive harm resulting from stacking of one dominant firm on another.

#### *B. The Yet-Unproven Record of Vertical Integration*

Although it is sometimes assumed that cost savings and quality improvements inevitably flow from hierarchical structures, economic evidence is lacking. Analysis of health system organizations suggests that economic integration has historically failed to generate clinical integration that results in either cost savings or improved efficiency.<sup>56</sup> For example, studies find no evidence that hospital systems lower costs or that integrated delivery systems perform better than independent practices.<sup>57</sup> This should come as no surprise as economic theory recognizes that upward pricing pressure results from vertical mergers.<sup>58</sup> Further, as Martin Gaynor has reminded, “consolidation is not

#### *C. Many Health Care Regulations Artificially Encourage Mergers and Inhibit Competition*

Another reason why vertical mergers in health care merit close scrutiny is the regulatory context in which firms operate. As is widely recognized, a host of regulations limit competition in health care. Many of these regulations make it difficult for rivals to enter markets, thereby increasing the likelihood of and rewards for consolidation. For example, certificate of need laws and payment regulations create significant barriers to competition in hospital markets; scope of practice and licensure laws inhibit rivalry in care delivery.<sup>66</sup> Incentives and ability to engage in foreclosure strategies are greatest where the entry or expansion by rivals is curtailed.

In addition, other health care regulations give providers strong financial incentives to consolidate that are unrelated to improving system efficiency.

---

Antitrust law sometimes finds itself playing catch-up to economic learning. Adherence to the outmoded theories underlying enforcers’ disinclination to challenge vertical mergers can impose significant costs on consumers and entrench dominant firm for years. With most health care sectors already highly concentrated and competition anemic at best, vertical consolidation should be closely monitored. And let’s remember, in the end, the four-leg/two leg distinction evaporated in *Animal Farm*.

---

coordination.”<sup>59</sup> Not unlike horizontal mergers, vertical mergers are subject to problems associated with culture clashes, inadequate pre-merger information, and challenges inherent in management integration.<sup>60</sup>

The lesson from hospital-physician consolidation provides a cautionary example of the risks of under-enforcement of vertical mergers. A number of studies suggest that hospital-physician integration, which has grown rapidly in recent years,<sup>61</sup> has raised physician costs, hospital prices, and per capita medical spending.<sup>62</sup> Moreover, a study of hospital ownership of physician practices in California demonstrates, the impact of higher hospital concentration on premiums becomes larger as vertical concentration increases.<sup>63</sup> Finally, while merger proponents usually claim that efficiencies—cost savings and quality improvements—may offset the harms of increased market power, the experience with physician-hospital consolidation is to the contrary.<sup>64</sup> As a Leemore Dafny and Thomas Lee have concluded, “The harsh reality is that it is difficult to find well-documented examples of health care mergers that have generated better outcomes or lower costs.”<sup>65</sup>

For example, some Medicare payment rules (which are often followed by commercial insurers), strongly encourage physician employment. For example under “facility-based billing,” hospital-owned practices charge more for outpatient visits and facility fees than independent physician practices, thus creating a strong financial incentive for physician employment by hospitals.<sup>67</sup> Likewise Medicare’s 340B program which provides discount outpatient drug pricing for qualifying entities, has led hospitals to increase their employment of physicians in certain specialties.<sup>68</sup> Further, certain payment and fraud and abuse regulations make employment by hospitals more attractive than independent practice or joint ventures. For example, Medicare reimbursement for employed physicians practicing in hospital outpatient departments is often much higher than it is for physicians performing the same services in their own offices as independent practitioners.<sup>69</sup> Further, the Stark Law and Anti-Kickback statute allow far greater leeway for physicians to refer to the hospitals that employ them than are recognized for joint ventures or other arrangements.<sup>70</sup>

#### D. Market Dominance Gives Rise to Anticompetitive Conduct

Experience demonstrates that the conditions described above offer opportunities and incentives to engage in anticompetitive conduct. The history of antitrust law in the health care sector is littered with examples of hospitals, physician organizations, and insurers that have taken advantage of their dominant market positions, barriers to entry, and the absence of effective regulatory oversight to disadvantage rivals and impair competition. For example, in just the last several years antitrust cases have been brought against: a dominant insurer that lessened competition by requiring hospitals to agree to most favored nations clauses;<sup>71</sup> a hospital with market power insisting that payors refrain from using tiering arrangements discouraged competitive contracting;<sup>72</sup> a large hospital system restraining competition by “all or nothing” contracting for its hospitals, restricting sharing of cost information and other practices;<sup>73</sup> and patented drug manufacturers conspiring with generic firms to delay competitive entry.<sup>74</sup>

At the same time, antitrust doctrine is tolerant of *extant* market power and rarely sanctions dominant firms, especially in cases involving unilateral refusals to deal with rivals.<sup>75</sup> It only condemns monopolists that inappropriately obtain or maintain market power, and even in those cases plaintiffs may settle for conduct commitments rather than divestiture of assets. Moreover, cases alleging anticompetitive exclusion have faced high doctrinal hurdles.<sup>76</sup> Given the law’s tolerance of extant market power and the propensity of dominant firms to entrench or extend their reach, merger law’s prophylactic remedies are especially important. As Professor Herbert Hovenkamp has argued, it is appropriate to apply the more demanding standard in merger cases “where a merger is likely to lead to conduct that is both anticompetitive but also is difficult or impossible for antitrust law to reach once the merger has occurred.”<sup>77</sup>

#### E. Uncertainty is a Two-Way Street

Because merger law is almost universally applied prospectively, cases necessarily involve predictions of future conduct and effects. Although considerable uncertainty attends such inquiries, antitrust precedent has made clear that the job of courts is to arrest “a rising tide of concentration” and to do so in its “incipiency.” This standard appropriately lowers the bar and should be applied to mergers where there is an appreciable danger of unilateral conduct, such as anticompetitive exclusion resulting from vertical mergers.<sup>78</sup>

At the same time, justifications for mergers merit close examination and courts in recent cases have

been reluctant to accept efficiency justifications in horizontal merger cases.<sup>79</sup> Even where beneficial change is likely to eventually result from vertical linkages, several subsidiary questions must be addressed before enforcers should consider adopting a go-slow approach. First, how long will it take for promised benefits to be achieved? Horizontal merger analysis provides an important caution regarding applying the “ease of entry” defense. It excuses competition-stifling consolidations only when parties can demonstrate that entry will be “timely.”<sup>80</sup> The logic of this requirement applies to evaluating justifications advanced for postponing antitrust interventions to prevent vertical foreclosure: consumers should not be forced to endure monopolistic pricing if promised, offsetting integrative benefits will not be forthcoming in the near future. Second, what assurances exist that the cost-savings will be passed along to consumers? In cases involving significant foreclosure, dominant hospitals acquiring physician practices and insurers enhancing their bargaining leverage likely lack incentives to reduce price or to aggressively innovate.

#### IV. Conclusion

Antitrust law sometimes finds itself playing catch-up to economic learning. Adherence to the outmoded theories underlying enforcers’ disinclination to challenge vertical mergers can impose significant costs on consumers and entrench dominant firm for years. With most health care sectors already highly concentrated and competition anemic at best, vertical consolidation should be closely monitored. And let’s remember, in the end, the four-leg/two leg distinction evaporated in *Animal Farm*.<sup>81</sup>

#### References

1. G. Orwell, *Animal Farm: A Fairy Story* (New York: Signet Classics, 2016).
2. J.B. Baker, “Vertical Restraints with Horizontal Consequences: Competitive Effects of Most Favored-Customer Clauses,” Speech before Business Development Associates, Inc. 1996 Antitrust Conference, Washington, D.C., Sept. 28, 1995, *available at* <<https://www.ftc.gov/public-statements/1995/09/vertical-restraints-horizontal-consequences-competitive-effects-most>> (last visited November 1, 2018).
3. See T.L. Greaney and B.D. Richman, “Delivering and Paying for Healthcare Services: Priorities for Competition in Critical Markets,” American Antitrust Institute White Paper, May 2018.
4. *FTC v. Advocate Health Care Network*, 841 F.3d 460 (7th Cir. 2016); *FTC v. Penn State Hershey Med. Ctr.*, 838 F.3d 327 (3d Cir. 2016); *ProMedica Health Sys., Inc. v. FTC*, 749 F.3d 559, 571 (6th Cir. 2014).
5. *Saint Alphonsus Medical Center-Nampa & FTC v. St. Luke’s Health System*, 778 F.3d 775, 793 (9th Cir. 2015); *FTC and North Dakota v. Sanford Health*, Case No. 1:17-cv-00133 (D.N.D. Dec. 15, 2017). See also *In the Matter of Renown Health, FED. TRADE COMM’N. C-4366* (Dec. 4, 2012) (consent order).

6. *U.S. v. Anthem, Inc.*, 855 F. 3d 345 (D.C. Cir. 2017); *United States v. Aetna, Inc.*, 240 F. Supp. 3d 1 (D.D.C. 2017).
7. See Greaney and Richman, *supra* note 3.
8. T.L. Greaney, "The Affordable Care Act and Competition Policy: Antidote or Placebo?" *Oregon Law Review* 89, no. 3 (2011): 811-845.
9. See L. P. Casalino, "The Medicare Access and CHIP Reauthorization Act and the Corporate Transformation of American Medicine," *Health Affairs* 36, no. 5 (2017): 865-869.
10. See M. Gamble, "The Quiet Takeover: Insurers Buying Physicians and Hospitals," *Beckers Hospital Review* (2011), available at <<https://www.beckershospitalreview.com/hospital-management-administration/the-quiet-takeover-insurers-buying-physicians-and-hospitals.html>> (last visited November 1, 2018); R. Abelson, "As Health Care Changes, Insurers, Hospitals and Drugstores Team Up," *New York Times*, November 26, 2017.
11. R. Abelson, "UnitedHealth Group to Buy Outpatient Surgery Chain for \$2.3 Billion," *New York Times*, Jan. 9, 2017.
12. R. Abelson, "UnitedHealth Buys Large Doctors Group as Lines Blur in Health Care," *New York Times*, December 6, 2017.
13. A.W. Mathews, "UnitedHealth to Buy Large Doctor Group for \$4.9 Billion," *Wall Street Journal*, December 6, 2017.
14. See R. F. Leibenluft, "Antitrust and Provider Collaborations: Where We've Been and What Should Be Done Now," *Journal of Health Politics, Policy & Law* 40, no. 4 (2015): 847-874.
15. See e.g., American Hospital Ass'n, Hospitals: The Changing Landscape is Good for Patients & Health Care, at 1 (2013), available at <<https://www.aha.org/system/files/2018-02/12-03-02-landscape.pdf>> (last visited November 1, 2018) ("Mergers may be the only recourse, as decades old regulatory barriers can keep hospitals and doctors from working closely together to improve care and reduce costs unless they are under the same ownership umbrella."); Engelberg Center for Health Care Reform at Brookings, *Bending the Curve—Person-Centered Health Care Reform: A Framework for Improving Care and Slowing Health Care Cost Growth*, at 8 and 31 (April 2013):  

[T]he antitrust enforcement framework [should be updated] to place greater emphasis on favoring clinical integration activities that are accompanied by financing reforms that move away from FFS payments and place providers at financial risk for quality gaps and higher costs... Many clinical coordination arrangements or even mergers among high market-share organizations could be considered safer if the merged organizations ...implement contracts with payers that place substantial emphasis on reducing overall costs while improving quality and if subsequent performance on these measures improves significantly. We view this as more meaningful evidence on the value of care than analysis that focuses on prices for specific services.

See also, M. Noether, "The St. Luke's-Saltzer Case: Can Antitrust and Health Reform Policies Converge?" CPI Antitrust Chronicle (April. 2014)(discussing efficiency benefits from physician employment); B. Klein, R.G. Crawford, and A.A. Alchian, "Vertical Integration, Appropriate Rents, and the Competitive Contracting Process," *Journal of Law and Economics* 21, no. 2 (1978): 297, 298 (in complex integration, "the costs of contracting will generally increase more than the costs of vertical integration.").
16. R.A. Berenson, P.B. Ginsburg, J.B. Christianson, and T. Yee, "The Growing Power of Some Providers to Win Steep Increases in Payment from Insurers Suggest Policy Remedies Are Needed," *Health Affairs* 31, no. 5 (2012): 973-981.
17. *U.S. v. AT&T*, 2017 WL 6329012 (D.D.C. 2018).
18. *United States v. Hammermill Paper Co.*, 429 F. Supp. 1271 (W.D. Pa. 1977).
19. The Non-Horizontal Merger Guidelines, issued in 1992 and revised in 1997, have received little attention in the courts and focus on harms from reducing the probability of entry and facilitating collusion; notably, the term "foreclosure" does not appear in the Guidelines. U.S. Department of Justice, Non-Horizontal Merger Guidelines, available at <<https://www.justice.gov/atr/non-horizontal-merger-guidelines>> (last visited November 1, 2018).
20. *Ford Motor Co. v. United States*, 405 U.S. 562 (1972).
21. The FTC's first challenge to a physician merger, commenced in 2012, involved the acquisitions by the largest hospital system in the Reno, Nevada area of two cardiology groups — making the system the employer of 88% of the active cardiologists in the market. The FTC entered into a consent order that did not enjoin the merger but rather required the system to release physicians from covenants not to compete. In the Matter of Renown Health, FTC Dkt. No. Docket No. C-4366 (December 4, 2012), available at <[www.ftc.gov/enforcement/cases-proceedings/1110101/renown-health-matter](http://www.ftc.gov/enforcement/cases-proceedings/1110101/renown-health-matter)> (last visited November 1, 2018).
22. *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd.*, 778 F.3d 775, 791(9th Cir. 2015).
23. See T. L. Greaney and D. Ross, "Navigating Through the Fog of Vertical Merger Law: A Guide to Counselling Hospital Physician Consolidation," *University of Washington Law Review* 91, no. 1 (2016): 199-251 at 221-222.
24. See, J. Baker, *supra* note 2 (comparing the broad brush antitrust maxim, "vertical good, horizontal bad" to Snowball's "four legs good, two legs bad" in George Orwell's *Animal Farm*).
25. Herbert Hovenkamp described Robert Bork's "beguilingly simple" account of the competitive effects of vertical mergers as follows:  

First, if vertical integration created efficiencies, then a vertically integrated firm would have cost advantages over unintegrated rivals. In that case vertical integration would deter unintegrated entry, but it is not antitrust's purpose to condemn cost savings. Second, if vertical integration did not create any efficiencies, then it would not impede entry by anyone. Firms that wished to enter at one stage alone could contract with firms at the other stage and be just as efficient as the vertically integrated firm. Third, if vertical integration resulted in higher costs, then vertically integrated firms would decline in favor of unintegrated firms. Fourth, in competitively structured markets vertical integration would lead to self-dealing, but that would do no more than force realignment in purchasing and sale patterns. Bork's observations were built on an extraordinarily narrow conception of entry barriers. He barely mentioned patents or other intellectual property rights. There was no conception that sunk costs plus risk could facilitate entry deterrence. H. Hovenkamp, "Robert Bork and Vertical Integration: Leverage, Foreclosure, and Efficiency," *Antitrust Law Journal* 79, no. 3 (2014): 983-1001.
26. R. H. Bork, *The Antitrust Paradox* (New York: Basic Books, 1978): at 225.
27. See, J. Goldsmith, L.R. Burns, A. Sen, and T. Goldsmith, Integrated Delivery Network: In Search of Benefit and Market Effects (National Academy of Social Insurance, 2015): at 8; Advocates for a permissive standard governing mergers also assert that alternative arrangements that enable vertical relations such as joint ventures and other contractual commitments are less efficient because of the uncertainties inherent in contracting and transaction costs. See B. Klein, R. G. Crawford, and A. A. Alchian, "Vertical Integration, Appropriate Rents, and the Competitive Contracting Process," *Journal of Law and Economics* 21, no. 2 (1978): 297-235 at 298.
28. T. G. Krattenmaker and S. C. Salop, "Anticompetitive Exclusion: Raising Rivals Costs to Achieve Power Over Price," *Yale Law Journal* 96, no. 2 (1986): 209-293 at 213.
29. Professor Salop's recent work systematically refutes the bases upon which Chicago School's permissive approach to vertical mergers is based. S. C. Salop, "Invigorating Vertical Merger Enforcement," *Yale Law Journal* 127, no. 7 (2018): 1962-1964. Other scholars have also criticized the law's neglect of

- competitive harms from vertical arrangements. See e.g., J.B. Baker, "Exclusion as a Core Competition Concern," *Antitrust Law Journal* 78, no. 3 (2013): 527-589.
30. S. C. Salop and D. P. Culley, "Potential Competitive Effects of Vertical Mergers: A How-To Guide for Practitioners," December 8, 2014, available at <<http://scholarship.law.georgetown.edu/cgi/viewcontent.cgi?article=2404&context=facpub>> ("Vertical mergers seldom involve firms that have monopolies protected by prohibitive entry barriers. If there is no monopoly, then there is no single monopoly profit.")
  31. See Salop and Culley, *supra* note 30 and Salop, "Invigorating Vertical Merger Enforcement" *supra* note 29.
  32. For example, vertical mergers may facilitate coordination in the hospital market by weakening the disruptive behavior of a nonintegrated hospital, a strategy that could be implemented with targeted input foreclosure or threats of foreclosure. See, Salop and Culley *supra* note 30 at 25-26.
  33. In 2008 the FTC challenged a ten year, exclusive sublicense for Venofer, a pharmaceutical product produced by Daiichi Sankyo used by dialysis clinics operated by Fresenius Medical Care, which would allow Fresenius to evade Medicare price regulations. In the Matter of Fresenius Medical Care AG & Co. KGaA and Daiichi Sankyo Company, Ltd, No. 081-0146 (F.T.C. Sept. 15, 2008), available at <[www.ftc.gov/sites/default/files/documents/cases/2008/09/080915freseniusna.pdf](http://www.ftc.gov/sites/default/files/documents/cases/2008/09/080915freseniusna.pdf)> (last visited November 1, 2018).
  34. See generally, Greaney and Ross, *supra* note 23; see also Declaration of Debra Hass-Wilson in *St. Alphonsus Med. Center-Nampa et al. v. St. Luke's Health* 2012 WL 9515607 (D.Idaho) (economic analysis of foreclosure effects in hospital acquisition of a primary care physician practice).
  35. Letter from D. Jones, Commissioner, California Department of Insurance to Attorney General Jeff Sessions and Assistant Attorney General Makan Delrahim, U.S. Dep't of Justice (August 1, 2018); Letter from J. L. Madara, Executive Vice President and CEO, American Medical Association to Assistant Attorney General Makan Delrahim (August 7, 2018); Letter from D. L. Moss, President, American Antitrust Division to Makan Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice (March 2017), available at <<https://www.antitrustinstitute.org/work-product/aai-calls-on-doj-to-block-the-merger-of-cvs-aetna-vertical-integration-will-restructure-important-healthcare-markets-to-the-detriment-of-competition-and-consumers>> (last visited December 10, 2018). See also, Statement of T. L. Greaney, California Department of Insurance Hearing on Proposed CVS/Aetna Merger (June 19, 2018).
  36. *Id.*
  37. *Id.*
  38. See notes 43-46 *infra*.
  39. See Madara Letter *supra* note 35; Greaney Statement *supra* note 35.
  40. "Cigna/Express Scripts: Coordinated PBM Impact on Health Plan Rivals Tops Potential Vertical Concerns," *The Capitol Forum* 6, no. 165, April 23, 2018.
  41. Salop *supra* note 29 at 1975-1980.
  42. *Id.* See also, Greaney and Ross, *supra* note 23.
  43. American Medical Association, *Competition in Health Insurance: A Comprehensive Study of U.S. Markets* (2017).
  44. M. Gaynor, "Examining the Impact of Health Care Consolidation," Statement before the Energy and Commerce Oversight Committee, U.S. House of Representatives, February 14, 2018, at 7.
  45. L. Dafny, "Health Insurance Industry Consolidation: What Do We Know From the Past, Is It Relevant in Light of the ACA, and What Should We Ask?" Testimony Before the Subcomm. on Antitrust, Competition Policy, and Consumer Rights of the S. Comm. on the Judiciary, 114 Cong. 5 (2015) available at <<http://www.judiciary.senate.gov/imo/media/doc/09-22-15%20Dafny%20Testimony%20Updated.pdf>> (last visited November 2, 2018).
  46. *Id.*
  47. B. D. Fulton, "Health Insurance Market Concentration in the United States: Trends in the United States and Policy Responses," *Health Affairs* 36, no. 9 (2017): 1530-1538.
  48. *Id.*
  49. C. Stern, "CVS and Walgreens are Completely Dominating U.S. Drugstore Industry," *Business Insider*, July 29, 2015.
  50. Fulton, *supra* note 47.
  51. Gaynor, *supra* note 44 at 6.
  52. *Id.*; see also Dafny, Health Care Consolidation, *supra* note 45.
  53. See generally *id.* at 7-9; See also M. Gaynor and R. J. Town, "The Impact of Hospital Consolidation," (2012) The Synthesis Project, Policy Brief No. 9, Robert Wood Johnson Foundation (hospitals); see also note 56 *infra* (physicians).
  54. See Gaynor, *supra* note 44 at 10-11.
  55. See C. C. Havighurst and B. D. Richman, "The Provider Monopoly Problem in Health Care," *Oregon Law Review* 89 (2011): 847-883; Greaney *supra* note 8.
  56. J. Goldsmith, L. R. Burns, A. Sen, and T. Goldsmith, *Integrated Delivery Networks: In Search of Benefits and Market Effects*, National Academy of Social Insurance (2015)(summarizing literature and analyzing performance of 15 of the largest integrated delivery systems).
  57. See e.g., J. M. McWilliams et al., "Delivery System Integration and Spending and Quality for Medicare Beneficiaries," *JAMA* 173, no. 15 (2013): 1447-1456.
  58. See Salop, Invigorating Vertical Merger Enforcement, *supra* note 29 at 1973 ("the same inherent upward pricing pressure occurs for vertical mergers" as for horizontal mergers).
  59. M. Gaynor, "Examining the Impact of Health Care Consolidation," Statement before the Energy and Commerce Oversight Committee, U.S. House of Representatives, February 14, 2018, at 11.
  60. See, e.g., J. Stuckey and D. White, "When and When Not to Vertically Integrate," McKinsey Quarterly, August 1993, available at <<https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/when-and-when-not-to-vertically-integrate>> (last visited November 2, 2018); Salop, Invigorating Vertical Merger Enforcement, *supra* note 29.
  61. See Gaynor, *supra* note 59.
  62. L.C. Baker, M. K. Bundorf, and D. P. Kessler, "Vertical Integration: Hospital Ownership of Physician Practices Is Associated with Higher Prices and Spending," *Health Affairs* 33, no. 5 (2014): 756-763 at 762; D. Haas-Wilson, "Hospital-Physician Integration: The St. Luke's Case," in *The Antitrust Revolution: Economics, Competition and Policy* (Kwoka ed., forthcoming); J. Robinson and K. Miller, "Total Expenditures per Patient in Hospital-Owned and Physician-Owned Physician Organizations in California," *JAMA* 312, no. 16 (2014): 1663-1669 (finding hospital-owned physician organizations had 10-20% higher total expenditures/patient than physician-owned organizations); C. Capps, D. Dranove, and C. Ody, "The Effect of Hospital Acquisitions of Physician Practices on Prices and Spending," Institute for Policy Research, Northwestern University, Working Paper No. WP-15-02, Feb. 2015 (finding that vertical integration was associated with a 13.7% increase in physician prices); and H. T. Neprash et al., "Association of Financial Integration Between Physicians and Hospitals With Commercial Health Care Prices," *JAMA Internal Medicine* 175, no. 12 (2015): 1932-1939 (finding that MSAs with increases in physician-hospital integration experienced median price increases of \$75). A. Dunn and A.H. Shapiro, "Do Physicians Possess Market Power?" *Journal of Law and Economics* 57, no. 1 (2014): 159-193. R. Kocher and N. Sahni, "Hospitals' Race to Employ Physicians — The Logic behind a Money-Losing Proposition," *New England Journal of Medicine* 363, no. 19 (2012): 1790-1793.
  63. R. Scheffler, "What Happens When Hospitals Buy Physician Practices in California: Impacts on ACA Premiums and Outpatient Prices," *Health Affairs* (forthcoming 2018).
  64. R.A. Berenson, "A Physician's Perspective on Vertical Integration," *Health Affairs* 36, no. 9 (2017): 1585-1590 at 1586 ("lit-

- erature reviews find integration has not improved quality and could even reduce it because of reduced competition”).
65. L. S. Dafny and T. H. Lee, “The Good Merger” *New England Journal of Medicine* 372, no. 22 (2015): 2077-2079.
  66. See Greaney and Richman, *supra* note 3.
  67. D. Dranove and C. Ody, “Employed for Higher Pay? How Medicare Facility Fees Affect Hospital Employment of Physicians,” Kellogg Faculty Publications (2016), available at <[http://www.kellogg.northwestern.edu/faculty/publication\\_detail.aspx?id=be3b359c-e31a-11e6-9fbb-0050569b3e41](http://www.kellogg.northwestern.edu/faculty/publication_detail.aspx?id=be3b359c-e31a-11e6-9fbb-0050569b3e41)> (last visited November 2, 2018).
  68. S. Desai and J. M. McWilliams, “Consequences of the 340B Drug Pricing Program.” *New England Journal of Medicine* 378, no. 6 (2018): 539-548.
  69. Robert Wood Johnson Foundation, “Health Policy Brief: Site-Neutral Payments,” *Health Affairs*, July 24, 2014, MedPAC, Report to Congress 2014.
  70. See 42 C.F.R. 411.357 (Stark Law exception allowing physician with bona fide employment relationship to make referrals to employer-hospital subject to certain conditions).
  71. *U.S. v. Blue Cross and Blue Shield of Michigan*, 809 F. Supp. 665 (E.D. Mich. 2011).
  72. See *U.S. and North Carolina v. Charlotte-Mecklenburg Hospital Authority*, d/b/a Carolinas Healthcare System, March 30, 2017 (Order denying defendant’s motion for judgment on the pleadings).
  73. *California v. Sutter Health*, CGC-18-565398 (San Francisco County Superior Court) (Mar. 29, 2018).
  74. See R. Feldman and E. Frondorf, *Drug Wars: How Big Pharma Raises Prices and Keeps Generics Off the Market* (New York, Cambridge University Press, 2017).
  75. See *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko*, 124 S. ct. 872 (2004); see also, T.L. Greaney, “Coping with Concentration,” *Health Affairs* 36, No.9 (2017): 1564-1571.
  76. J.B. Baker, “Exclusion as a Core Competition Concern,” *Antitrust Law Journal* 78, no. 3 (2013): 527-589.
  77. H. Hovenkamp, “Prophylactic Merger Policy,” *University of California Hastings Law Journal* (forthcoming 2018).
  78. See *Id.* (discussing the application of the incipency test in the case of vertical mergers).
  79. See e.g. *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke’s Health Sys., Ltd.*, 778 F.3d 775, 791(9th Cir. 2015); *U.S. v. Anthem, Inc.*, 855 F. 3d 345 (D.C. Cir. 2017).
  80. U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, (2010) §9.
  81. *Animal Farm*, *supra* note 1. (“The creatures outside looked from pig to man, and from man to pig, and from pig to man again; but already it was impossible to say which was which.”)